

7.2.1 Residential Stock Electric Appliance and Building Equipment Usage

		Power Draw (W) (1)		Annual Usage (hours/year)		Annual Consumption (kWh/year)	Annual Cost (\$) (2)
		Operating	Stand-by	Operating	Stand-by		
Kitchen							
	Coffee Maker	219	0	421	0	90	7
	Dishwasher	(3) 0.332	0	(4) 365	0	120	10
	Microwave Oven	1500	3	72	8688	140	11
	Refrigerator-Freezer					940	76
	Freezer					680	55
Lighting							
	18-W Compact Fluorescent	18	0	1189	0	20	2
	60-W Incandescent Lamp	60	0	672	0	40	3
	100-W Incandescent Lamp	100	0	672	0	70	6
	Torchiere Lamp-Halogen	300	0	1460	0	440	36
Bedroom and Bathroom							
	Hair Dryer	710	0	50	0	40	3
	Waterbed Heater	350	0	3051	0	1070	87
Laundry Room							
	Clothes Dryer			(4) 359		1000	81
	Clothes Washer	(3) 0.276	0	(4) 392	0	110	9
Home Electronics							
	Cable Box	20	12	1456	7304	110	9
	Computer (CPU & Monitor)	182/30	0	1337/632	0	260	21
	Portable Stereo	7	2	526	5606	20	2
	Compact Stereo		12	964	7796	110	9
	Rack Stereo	53	12	1664	7096	150	12
	Color Television	83	5	2810	5950	(5) 260	21
	VCR	14	6	2424	6336	70	6
Heating and Cooling							
	Dehumidifier	600	0	1620	0	970	79
	Furnace Fan	295	0	1350	0	400	32
	Window Fan	30	0	270	0	10	1
Water Heating							
	Water Heater-Family of 4	4500	0	(6) 64	N.A.	4770	386
	Water Heater-Family of 2	4500	0	(6) 32	N.A.	2340	190
Miscellaneous							
	Clock/Radio	2	2	131	8629	20	2
	Lawn Mower	1500	0	20	0	30	2
	Pool Pump	1000	0	792	0	790	64
	Well Pump	725	0	115	0	80	6
Total Standby		0	57	0	8760	500	41

Note(s): 1) Power draw will vary due to appliance components and modes of operation. 2) \$0.080/kWh. 3) Excludes water heating. Units are in kWh/cycle. 4) Cycles/year. 5) Energy consumption is not multiplicative for multiple units. Electricity consumption increases approximately 40 kWh per unit. 6) Gallons/day.

Source(s): BTS/A.D. Little, Electricity Consumption by Small End Uses in Residential Buildings, August 1998, Exhibit 6-8, p. 6-10 for coffee maker, cable box, clothes washer, computer, dehumidifier, dishwasher, furnace fan, microwave oven, pool pump, torchiere lamp-halogen, waterbed heater, and well pump; LBNL, Energy Data Sourcebook for the U.S. Residential Sector, LBNL-40297, September 1997, p. 100-102 for clothes dryers, Table 10.2, p. 108 for lighting, and p. 62-67 for water heaters; LBNL, Miscellaneous Electricity Use in the U.S. Residential Sector, LBNL-40295, April 1998, Appendix D, p. D-1-D-9 for hair dryer, window fan, and lawn mower; EIA, Supplement to AEO 2000, Dec. 1999, Table 21 for refrigerator and freezer; BTS/LBNL, Energy Use of Home Audio Products in the U.S., Dec. 1999, Table 4-9, 28 and p. 31-35 for audio electronics; BTS/LBNL, Energy Use of Televisions and Videocassette Recorders in the U.S., Mar. 1999, Tables 3-6 - 3-8, p. 19-22, and Tables 4-6 - 4-8, p. 32-34; GAMA, Consumer's Directory of Certified Efficiency Ratings for Heating and Water Heating Equipment, April 2000 for water heater power draw; and LBNL for total standby.